

Computer Centre

WEEKLY NEWSLETTER

Date : Week ended 3 June 1971

Authorization : Director of the Computer Centre

1. OPERATIONS

1.1 PDP-10 System

Monday	31 May	Internal invoices processing 1000-1130
Tuesday	1 June	Accounting files listings 1000-1020, 1100-1140 System development 1300-1430 (Batch only offline)
Wednesday	2 June	System development 1300-1419 (Batch only offline) Parity error maintenance 1825-1908
Thursday	3 June	System development 1300-1410 (Batch only offline) Disk read errors maintenance 1651-1720 System development 1900-1940 (Batch only offline)

Schedule for forthcoming week:

Maintenance	0700-0900, 2300-2400
Operations	1000-2200

1.2 GE-225 System

Schedule for forthcoming week: Maintenance 0700-0900, 1130-1230
Operations 0900-1130, 1230-2400

2. FORTRAN ERRORS

- (a) If a logical unit number in a FORTRAN READ or WRITE statement is subscripted with a variable which is used also in the I/O list as a subscript, results become unpredictable. In the code produced by the statement the register containing the value of the variable is destroyed and hence the subscripted quantities will contain unpredictable numbers.

examples:

(i) READ (K) N,(IX(K),IN(J),IB(K),J=2,N)

(ii) READ (IUNIT(L)) N,(IN(J),IB(K),J=2,N)

Both the above examples are correct. The following example is invalid.

(iii) READ (IUNIT(K)) N,(IN(J),IB(K),J=2,N)

- (b) The FORTRAN compiler recognizes tabs in FORMAT statements and inserts them as tab characters (not the equivalent number of spaces) into format strings. The FORTRAN operating system, however, converts these tab characters to single blanks on output, rather than 8 blanks per tab as might be expected.

example:

```
FORMAT ('A<tab >A<tab >A')
```

will produce an output of A A A.

- (c) The FORTRAN compiler does not keep track of jumps that might take it outside the range of the current DO loop. In cases of the extended range of a DO loop containing another DO loop, as in the following example, certain registers are not restored from memory after returning from the extension of the DO range.

example:

```
DO 50 I=1,10
  IF (I-5) 50,7,50
50  CONTINUE
  STOP
7   DO 88 K=1,10
  KK=K*10
88  CONTINUE
  GO TO 50
END
```

- (d) In the following example, the assignment statement implies a double precision float operation.

```
DOUBLE PRECISION B
B=N
```

Correct code is only produced for integers of 27 or less bits. For integers greater than 27 bits the compiler zeros the second word of the double precision scalar.

(e) The error message

?FILENAME FORTR NOT ON DEVICE DISK

is caused when the FORTRAN operating system cannot find a file with the name requested. Either the file does not exist at all, or more particularly, users are using file names with 6 characters when the operating system only recognizes the first five characters of the name.